

Amendments to the Claims:

Please cancel claims 1-13 without prejudice to continued prosecution, and please add new claims 14-36 as follows. The claims and their status are shown below.

1-13. (Canceled)

14. (New) Crystalline or semi-crystalline trehalose solids, characterized in that the solids:

- a) have a specific surface area greater than $0.25 \text{ m}^2/\text{g}$, and
- b) comprise mixtures of trehalose dehydrate and anhydrous trehalose.

15. (New) The trehalose solids according to claim 14, characterized in that the solids have a specific surface area greater than $0.30 \text{ m}^2/\text{g}$.

16. (New) The trehalose solids according to claim 14, characterized in that the solids have a specific surface area of at least $0.40 \text{ m}^2/\text{g}$.

17. (New) The trehalose solids according to claim 14, characterized in that the solids have an average particle size greater than $100 \text{ }\mu\text{m}$.

18. (New) The trehalose solids according to claim 17, characterized in that the solids have an average particle size greater than $150 \text{ }\mu\text{m}$.

19. (New) The trehalose solids according to claim 17, characterized in that the solids have an average particle size greater than $200 \text{ }\mu\text{m}$.

20. (New) The trehalose solids according to claim 17, characterized in that the solids have an average particle size greater than $250 \text{ }\mu\text{m}$.

21. (New) A process for preparing crystalline or semi-crystalline trehalose solids, wherein the process comprises the following steps:

- a) heating a solution of trehalose above its temperature of solubility, wherein the trehalose comprises a mixture of trehalose dehydrate and anhydrous trehalose,

- b) applying shear such that the sheared trehalose has a specific surface area greater than $0.25 \text{ m}^2/\text{gm}$,

- c) cooling the sheared trehalose to obtain the trehalose solids, and

- c) optionally, drying the trehalose solids.

22. (New) The process according to claim 21, wherein step b) comprises applying shear such that the sheared trehalose has a specific surface area of greater than $0.30 \text{ m}^2/\text{g}$.

23. (New) The process according to claim 21, wherein step b) comprises applying shear such that the sheared trehalose has a specific surface area of at least $0.40 \text{ m}^2/\text{g}$.

24. (New) The process according to claim 21, characterized in that the solution of trehalose in step a) is an aqueous solution.

25. (New) The process according to claim 24, characterized in that the aqueous solution is prepared from trehalose and at least 5% water based on dry substance of trehalose.

26. (New) The process according to claim 21, characterized in that the temperature of solubility is at least 80°C .

27. (New) A food, feed, pharma, cosmetic, detergent, fertilizer or agrochemical product, comprising crystalline or semi-crystalline trehalose solids, wherein said trehalose solids comprise a mixture of trehalose dehydrate and anhydrous trehalose, and wherein said trehalose solids have a specific surface area greater than $0.25 \text{ m}^2/\text{g}$.

28. (New) The product according to claim 27, characterized in that said trehalose solids are applied as a cryoprotectant.

29. (New) The product according to claim 27, characterized in that said trehalose solids are applied as a carrier.

30. (New) The product according to claim 27, characterized in that said trehalose solids are applied as tablets or as binder in tablet formation.

31. (New) The product according to claim 27, wherein said trehalose solids have a specific surface area greater than $0.30 \text{ m}^2/\text{g}$.

32. (New) The product according to claim 27, wherein said trehalose solids have a specific surface area of at least $0.40 \text{ m}^2/\text{g}$.

33. (New) The product according to claim 27, wherein said food or feed product is for ingestion by humans or animals.

34. (New) A tablet comprising crystalline or semi-crystalline trehalose solids, wherein the trehalose solids comprise a mixture of trehalose dehydrate and anhydrous trehalose, wherein

the trehalose solids have a specific surface area greater than $0.25 \text{ m}^2/\text{g}$, and wherein the tablet has a tensile strength of at least 4 N/mm^2 .

35. (New) The tablet of claim 34, wherein the tablet has a tensile strength of at least 5 N/mm^2 .

36. (New) The tablet of claim 34, wherein the tablet has a tensile strength of more than 7 N/mm^2 .